



The Importance of Understanding Non-Degree Credential Quality

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The number of non-degree credentials (NDCs) has ballooned over the past decade while the number of students enrolled in degree granting programs has dropped.¹ With hundreds of thousands of NDCs to choose from, students, program funders, and employers have little guidance on which ones offer the highest quality education and ROI.² This paper provides an overview of NDCs and their significance in the modern labor market, particularly in light of the barriers and challenges associated with attainment of traditional college degrees many learners face. Highlighting the growing demand for alternative pathways to skill acquisition and career advancement, the paper examines the diverse landscape of NDCs, ranging from certificates and industry certifications to apprenticeships and micro-credentials. Through this analysis, it is increasingly apparent there is a need for enhanced quality indicators with alignment between NDC offerings and industry demands to achieve maximum transparency.

Education Quality Outcomes Standards (EQOS), an independent non-profit organization operated in partnership between Burning Glass Institute and Jobs For the Future, is pioneering a novel approach to assess the quality and efficacy of NDCs. EQOS offers an outcomes-based signal of quality that contrasts with traditional data collection methods by using worker reported data that does not rely on survey responses. By studying five dimensions of outcomes, including employment, opportunity, access, learnings, and demand, EQOS aims to empower stakeholders with valuable insights for navigating the complex landscape of NDCs, enabling more informed decision-making on which programs to attend,

recruit from or fund.

AN OVERVIEW OF CREDENTIALS

Through the Connecting Credentials project, Lumina and Corporation for a Skilled Workforce (CSW) define a credential as “a documented award by a responsible and authorized body attesting that an individual achieved specific learning outcomes or attained a defined level of knowledge or skills.”³ Credentials play an important role in the modern labor market by signaling to employers a worker’s acquired knowledge or skills and simplifying the hiring process. Credentials can take many forms, but are often broken into two categories: degrees and non-degree credentials. Different credentials offer workers flexibility to learn throughout their careers with different options in cost, length, and depth.

COLLEGE DEGREES

The most recognizable credentials are degrees from two and four-year colleges and universities. Bachelor’s degrees are the most popular credential for students to earn followed by associate degrees; in the 2020-2021 academic year, 2,637 four-year and 1,294 two-year postsecondary institutions awarded roughly 2.1 million bachelor’s degrees and 1 million associate’s degrees.^{4,5} The college wage premium is well-known: workers and employers both have a strong sense of what knowledge and skills a degree embodies and usually have the capacity to broadly evaluate the relative merit of different degrees.^{6,7} Even though college degree holders on average earn more, a degree does not guarantee college-level employment. 52% of bachelor’s degree holders are underemployed

one year following graduation and the majority are likely to remain so.⁸ Furthermore, degrees are not an option for everyone and not everyone who starts college graduates. 62% of Americans over 25 do not have a bachelor's degree,⁹ despite 45% of job postings requesting one,¹⁰ and as of the 2021-2022 academic year there are around 40.4 million adults in the United States who have some college but no degree.¹¹

NON-DEGREE CREDENTIALS

College degrees are not the only means to gaining and presenting skills critical to obtaining employment and enabling economic mobility. During an age of rapid technological advancements and shifting labor market composition, workers need ways of learning new skills quickly and communicating them effectively to employers. NDCs have filled that need: they help workers who want to switch careers (reskilling), those who want to gain new skills to advance in their current role (upskilling), or workers who are skilled through alternative routes (STARs).¹² NDCs are also enabling workers who cannot access a four-year degree to continue to grow their careers; for these workers, NDCs are an alternative, cost-effective, and flexible way to grow and demonstrate skills and competencies.

In 2022, Credential Engine documented over a million credentials in the United States with more than 670,000 stemming from nontraditional sources like Massive Open Online Courses (MOOCs), apprenticeships, licenses, and coding bootcamps.¹³ While definitions of NDC categories are not universally agreed-upon, the most common types of NDCs and definitions can be found below:

- **Certificates:** Certificates are provided by educational institutions and consist of structured learning. The credential certifies the learner mastered all content in a particular curriculum

including assessments and coursework.¹⁴

- *Example:* Western Governors University's Leadership Certificate from the School of Business. It is based on 3 courses and takes 4 months to complete. The cost is \$2,250.¹⁵
- **Industry Certifications:** Industry certifications are awarded by non-government agencies, professional groups and educational institutions. They certify that the recipient has requisite ability, skills, and knowledge to work in a particular field.¹⁶ These certifications often require workers to participate in continuing education requirements to maintain their certification status.
 - *Example:* Amazon Web Services Cloud Practitioner certificate. It is a 90 minute exam offered by Amazon for \$100. Exam preparation is a separate process, and Amazon links to a free preparation course on their website.¹⁷
- **Apprenticeships:** Apprenticeship certificates are a type of credential earned after structured on-the-job training. Registered Apprenticeships (RAs) are supported through the Department of Labor and provide nationally granted and industry recognized credentials; many states also provide tax incentives to companies hosting RAs. One defining characteristic of RAs is that they provide the learner a salary while they receive hands-on education, and raises are built in to reflect skill mastery.¹⁸
 - *Example:* Mission Healthcare in Michigan has a medical aide registered apprenticeship that offers on-the-job training as well as a free, concurrent nine-month certificate course at Baker College funded in collaboration with the nonprofit, Michigan Works. Apprentices start the program earning \$16.04 per hour and

graduate with a wage of \$19.28.¹⁹

- **Licenses:** Licenses, unlike other forms of NDCs, are legally mandated for a worker to be employed in an occupation. They are almost always issued by a government body and must be renewed periodically for workers to maintain their licensure.²⁰

- *Example:* Massasoit Community College in Brockton, MA offers a three month non-credit course on real estate sales to prepare students for the licensure exam. Tuition is \$469 and the exam fee is \$85.²¹

- **Short-term credentials:** Short-term credentials take less time to complete than associate or bachelor's degrees, are usually less expensive, and usually result in a college-level certificate or industry recognized certification.²² While there is no universal definition for short-term credentials, some institutions define them based on credit hours, hours of instruction, or weeks of instruction. All definitions include the mastery of a specific skill and fewer credits and less time than needed for an associate degree.

- *Example:* Dutchess Community College in Poughkeepsie, NY offers a Certified Nurse Aide course that prepares students for the certification exam. It is 120 hours of coursework with an additional 30 hours of clinical placement. The course costs \$1,595 and the certification exam is an additional \$115 for first time test-takers.^{23,24}

- **Micro-credentials:** Micro-credentials are the newest type of short-term credential. When people use this term, they generally are talking about badges or certificates learned through primarily online providers. Micro-credentials are earned by finishing small modules of study that are faster to complete than other forms of credentials leading to qualifications like certificates or degrees.²⁵ They represent an “unbundling” of education,

where a narrow skillset is learned through brief, often stackable courses.²⁶

- *Example:* edX offers “How to use ChatGPT in Tech/Coding/Data”, a one week course offered for free.²⁷

MEETING INDUSTRY DEMAND AND ENSURING RETURN ON INVESTMENT

Demand for inclusive hiring, upskilling and/or reskilling is high: 80% of employers participating in the World Economic Forum's *Future of Jobs Report* indicate a strong desire to invest in on-the-job training.²⁸ Additionally, those employers recognize that the skills they need are not reflected in their existing upskilling programs. Unfortunately, this implies that the desire to use skills-based practices has had more momentum than implementation. This is especially true in regards to adopting skills-based hiring practices. Previous analysis by The Burning Glass Institute in collaboration with Harvard Business School showed that implementing skills-based hiring practices only contributed to 1 in 700 new jobs for non-degree hires last year.²⁹ Of companies that removed degree requirements, only 37% substantially changed the academic profile of those they ultimately hired.³⁰

Without a reliable metric for understanding alternative credentialing systems, it's possible employers might underutilize them or only value the ones they know, limiting worker's ability to seek alternative routes. The labor market is changing rapidly, and workers need to learn skills quickly. A system that evaluates the value and outcomes of a credential – rather than just the fact of earning it – leads to alternative sourcing options and a wider set of paths for workers to access jobs and mobility.

While employers know what skills or even what type of credential they may want current workers and future hires to have, they don't have strong guidance on which specific credentialing program

would be most beneficial. A standard definition and method for evaluating credential quality would allow them to optimize their efficiency in the talent pools based on occupational and skills alignment. Employers traditionally use degrees and work experience as a signal for skills, but a concrete framework for cross-referencing skills and credential quality would allow them to supplement or loosen this potentially limiting requirement, opening the door to hiring talent from talent with a wider variety of education backgrounds.

TRANSPARENCY FOR WORKERS AND LEARNERS

Workers and learners interested in gaining new skills critical to employment, advancement, and economic mobility have few sources of helpful information about which credentials align best with career goals or which programs might be most beneficial. Where available, information is often fragmented or narrow in scope. For example, the Department of Labor's list of the fastest-growing occupations and average salaries has limited information on how to earn required certifications, the outcomes of each program, or whether alternate pathways for skill acquisition exist.³¹

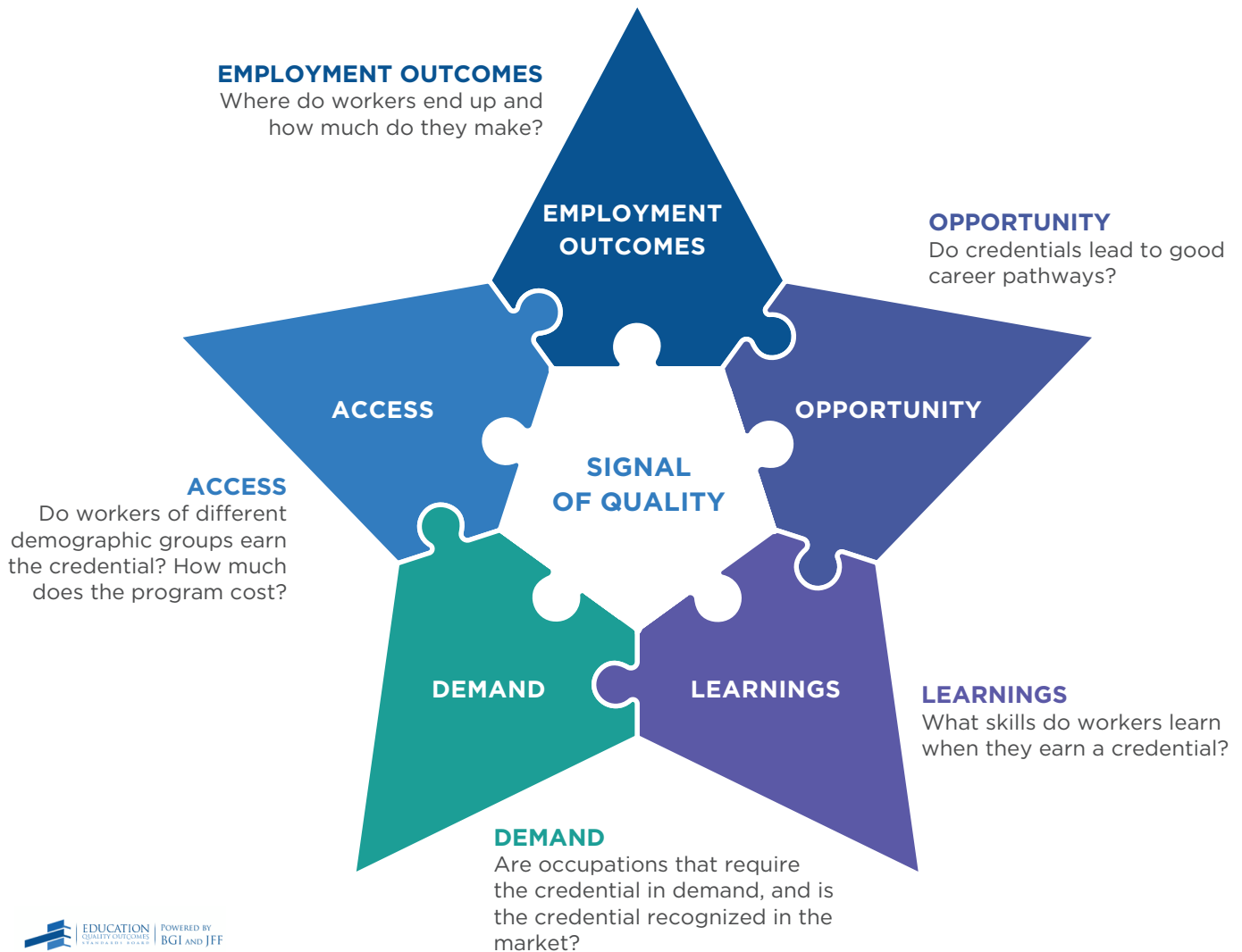
There are many educational options offered in a variety of formats once someone decides to learn a new skill. However, the quality and employers' perceptions of any particular credential remain unclear. This lack of clarity muddles expectations. For example, a student may think earning micro-credentials could replace earning a degree or other kind of credential despite many employers viewing micro-credentials as supplemental or complementary training.³² Conversely, some potential learners may forgo useful certifications because they don't know how to evaluate their merit or are overwhelmed by the number of choices. Despite a wide variety of NDC options, without a way to quickly sort and evaluate them,

they may go under-leveraged as potential learners struggle to make informed decisions on which ones are best for them.

Providers of credentials have a hard time standing out. The most recent *Counting Credentials* estimates there are at least 23,000 institutions issuing NDCs – from non-traditional or non-academic providers to universities – but notes there is limited data for MOOCs or other micro-credentials and that measuring quality is a critical need for the industry³³. Some providers, like members of the Council on Integrity in Results Reporting (CIRR), have thorough self-reviews that give prospective students and employers a strong picture of the efficacy of their program.³⁴ But these reviews are only available because providers choose to perform them; it is very hard to compare to outside parties. More data on credential performance can also help providers tailor their course content and selection to best prepare students for success.

Workforce development and education investments can yield positive returns in terms of economic growth, reduced unemployment, poverty alleviation, increased tax revenue, and enhanced social equity. There has already been a strong national effort to develop NDCs for these reasons, in particular short-term credentials. Analysis from HCM Strategists revealed that 59 short-term NDC funding initiatives run across 28 states resulted in roughly \$3.81 billion invested in this form of education.³⁵ States need a reliable way to ensure their investment dollars go to programs with demonstrated positive outcomes for students. The lack of data is a serious issue for public, private, and philanthropic funders alike.

A New Outcomes-Based EQOS Framework



CONCLUSION

Though workers who hold NDCs typically see increased employment, the ability to evaluate NDCs is far behind the market's understanding of the return on investment for those with college degrees.^{36,37} The range of NDC providers is much wider: community colleges, professional organizations, online providers, coding bootcamps, as well as traditional colleges and universities. Due to the nascency of the space, the plethora of providers, and most importantly, the lack of standardized, credible data on quality, learners, employers, and policymakers often

struggle to accurately ascertain the value of an NDC or determine trustworthy NDC providers.³⁸

Better information about NDC quality, both overall and for specific credentials and providers, can drive broad returns in the labor market and broader economy. Such information would help workers select which NDC, if any, is appropriate for them. Meanwhile, employers can use such data to identify the candidates with the skills they need, as well as provide targeted training to current employees. High-quality providers would be able

to distinguish themselves and tailor programs to align with employer needs. Finally, private and public funders could make informed investment decisions into growing the highest quality, in-demand credentials and credential providers.

Education Quality Outcomes Standard (EQOS) has created a rigorous framework to help alleviate these challenges. To create this first-of-its-kind, outcomes based signal of quality, EQOS is using workers' self-reported employment and education histories before and after they attain NDCs. EQOS studies five dimensions of outcomes:

- Employment (jobs and wages)
- Opportunity (mobility and non-wage amenities)
- Access (demographics of graduates)
- Learnings (skills reported)
- Demand (employer need for occupations)

The scale of credential information will be unmatched, it will be the largest data set of credential outcomes by number of observations and credentials covered.

Using this signal of quality, EQOS will build tools to enable workers, employers, providers, funders, and public policy experts to make better decisions around which credentials they earn, hire, provide, and fund. Stakeholders will be able to access information about thousands of credentials. Our signal of quality will provide guiding information for employers to understand what an employee with a specific credential can offer, for workers to determine what credentials line up with their career goals, for providers to offer the best credentials possible, and to allow investors to make more informed investment decisions.

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